

GenCore version 5.1.4_p5_4578
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OM protein - protein search, using sw model

Run on: March 14, 2003, 09:22:34 ; Search time 42.0962 seconds
(without alignments)
2108.144 Million cell updates/sec

Title: US-09-836-077-3

Perfect score: 3615

Sequence: 1 MTPPPGGAAPSAPRARVPG.....LAASLWGLVPTLTGLLVH 666

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

arched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

- A_Geneseq_101002:*
- 1: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1980.DAT:*
 - 2: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1981.DAT:*
 - 3: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1982.DAT:*
 - 4: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1983.DAT:*
 - 5: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1984.DAT:*
 - 6: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1985.DAT:*
 - 7: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1986.DAT:*
 - 8: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1987.DAT:*
 - 9: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1988.DAT:*
 - 10: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1989.DAT:*
 - 11: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1990.DAT:*
 - 12: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1991.DAT:*
 - 13: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1992.DAT:*
 - 14: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1993.DAT:*
 - 15: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1994.DAT:*
 - 16: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1995.DAT:*
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 - 18: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1997.DAT:*
 - 19: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1998.DAT:*
 - 20: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1999.DAT:*
 - 21: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2000.DAT:*
 - 22: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2001.DAT:*
 - 23: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Match	Query Length	ID	Description
1	3615	100.0	666	20 AAY39445	Human semaphorin 2
2	3615	100.0	666	20 AAY28552	SBSEMLV polypeptid
3	3615	100.0	666	20 AAW92804	EP-892047 Seq ID 3
4	3615	100.0	666	21 AAY82433	Human CDw108 prote
5	3615	100.0	666	21 AAY55009	Human semaphorin,
6	3615	100.0	666	22 AAE02650	Human sema7A prote
7	3443	95.2	634	21 AAY56854	Human semaphorin K
8	3214	88.9	664	21 AAY82434	Mouse semaphorin
9	2079	57.5	379	22 AAB93440	Human protein sequ
10	1897	52.5	394	20 AAW92805	EP-892047 Seq ID 4

11	1345.5	37.2	606	21 AAY56855	Semaphorin K1 poly
12	1029	28.5	215	20 AAY28553	SBSEMLV polypeptid
13	680.5	18.8	893	23 ABB97964	Human protein sequ
14	674.5	18.7	832	22 AAE03818	Human gene 1 encod
15	674.5	18.7	832	23 ABB64522	Human albumin fusi
16	674.5	18.7	837	21 AAY99410	Human PRO1480 (UNQ
17	674.5	18.7	837	22 AAB29250	Human PRO polypept
18	674.5	18.7	837	22 AAB66159	Protein of the inv
19	654.5	18.1	771	16 AAR71380	Human semaphorin I
20	654.5	18.1	771	22 AAG62726	Amino acid sequenc
21	649.5	18.0	796	19 AAY21264	Human semaphorin I
22	637.5	17.6	791	23 AAG77413	Human NOV7 protein
23	617	17.1	749	22 AAG62727	Amino acid sequenc
24	601.5	16.6	861	18 AAW17658	Mouse CD100 antige
25	598.5	16.6	861	19 AAW58540	Human semaphorin,
26	598.5	16.6	861	22 AAB81035	Human semaphorin,
27	598.5	16.6	861	22 AAB51251	Murine CD100 amino
28	597	16.5	785	22 AAG62731	Mouse CD100 protei
29	591.5	16.4	751	20 AAW30617	Amino acid sequenc
30	591.5	16.4	751	21 AAB28379	Human semaphorin E
31	591.5	16.4	751	22 AAG62728	Clone BR533_4. Ho
32	590	16.3	681	21 AAB01396	Amino acid sequenc
33	570	15.8	862	18 AAW17657	Neuron-associated
34	570	15.8	862	22 AAB81036	Human CD100 antige
35	570	15.8	862	22 AAB51252	Human CD100 amino
36	566	15.7	775	19 AAW63748	Human CD100 protei
37	558	15.4	775	20 AAY43090	Human semaphorin,
38	548.5	15.2	777	20 AAY27127	Mouse semaphorin H
39	548.5	15.2	777	21 AAY99427	Human brain tissue
40	548.5	15.2	777	22 AAY29197	Human PRO1491 (UNQ
41	548.5	15.2	777	22 AAB66176	Human PRO polypept
42	543	15.0	477	16 AAR74175	Protein of the inv
43	536	14.8	770	22 AAB88349	Human collapsin.
44	535.5	14.8	777	20 AAY43091	Human membrane or
45	535.5	14.8	777	22 AAG62730	Mouse semaphorin H
					Amino acid sequenc

ALIGNMENTS

RESULT 1

AAY39445

ID AAY39445 standard; Protein; 666 AA.

XX

AC AAY39445;

XX

DT 01-DEC-1999 (first entry)

XX

DE Human semaphorin ZSMF-7.

XX

SE Semaphorin; transmembrane; secreted; neuroregeneration;

XX

IM immunosuppression; diabetes; multiple sclerosis; rheumatoid arthritis;

XX

KL proliferation; differentiation.

XX

OS Homo sapiens.

XX

EH Key

XX

FT Location/Qualifiers

XX

FT Domain

XX

FT 561..620

XX

FT /note= "Ig-like domain"

XX

PN WO9945114-A2.

XX

PD 10-SEP-1999.

XX

PF 03-MAR-1999;

XX

PR 99WO-US04758.

XX

PR 03-MAR-1998;

XX

PR 98US-0076611.

XX

PA (ZYMO) ZYMOGENETICS INC.

XX

PI Holloway JL, Lofton-Day CE;

XX

PI WPI; 1999-540845/45.

XX

DR

QY 61 HVGQDRVDFGQTEPHITVLFHEFGSSVWYGGKGYVLEDFPEGKNASVTVNIGSTKGC 120
Db 61 HVGQDRVDFGQTEPHITVLFHEFGSSVWYGGKGYVLEDFPEGKNASVTVNIGSTKGC 120
QY 121 LDKRCENYITLLRRSEGLLACGTNARHPSCWNLVNGTVPLGEMRGYAPSPDENSIV 180
Db 121 LDKRCENYITLLRRSEGLLACGTNARHPSCWNLVNGTVPLGEMRGYAPSPDENSIV 180
QY 181 LFEQDEVYSTIRKQYNGKIPRFRIRGESELYTSDTVNQNFQIKATIVHQDAYDDKI 240
Db 181 LFEQDEVYSTIRKQYNGKIPRFRIRGESELYTSDTVNQNFQIKATIVHQDAYDDKI 240
QY 241 YFFREDNDKNEAPLNVSRAQLCRGQGGESSLSVSKWNTFLKAMLVCSDAATNKNF 300
Db 241 YFFREDNDKNEAPLNVSRAQLCRGQGGESSLSVSKWNTFLKAMLVCSDAATNKNF 300
QY 301 NQLQDVFLLPDPGQWRDTRVYGVFSNPWNYSAVCVYSLGDDIDKVFRTSSLKGYHSSLPN 360
Db 301 NQLQDVFLLPDPGQWRDTRVYGVFSNPWNYSAVCVYSLGDDIDKVFRTSSLKGYHSSLPN 360
QY 361 PRPGKCLPDQOQIPTETFOVADRHPEVAQRVEPMGPKLTPLFHSKYHYQKVAVHRMOASH 420
Db 361 PRPGKCLPDQOQIPTETFOVADRHPEVAQRVEPMGPKLTPLFHSKYHYQKVAVHRMOASH 420
QY 421 GETFHVLYLTTDRGTTHKVVPEGEQHSFAFNIMEIQPFRRAAAQTMSLDAERKLYVS 480
Db 421 GETFHVLYLTTDRGTTHKVVPEGEQHSFAFNIMEIQPFRRAAAQTMSLDAERKLYVS 480
QY 481 SOWEVSQVPLDCEVYGGCHCLMSRDYPCGWDQGRGCISSYSSRSVLSQSNAPHPKE 540
Db 481 SOWEVSQVPLDCEVYGGCHCLMSRDYPCGWDQGRGCISSYSSRSVLSQSNAPHPKE 540
QY 541 CNPKPDKAPLQKVS LAPNSRYLLSCPMESRHATYSWRHKNVQSCPEGHQSPNCILFI 600
Db 541 CNPKPDKAPLQKVS LAPNSRYLLSCPMESRHATYSWRHKNVQSCPEGHQSPNCILFI 600
QY 601 ENLTAQQYGHYFCEAQEGSYFREAQHWQLLPEDGIMAEHLGHACALASLWGLVPLT 660
Db 601 ENLTAQQYGHYFCEAQEGSYFREAQHWQLLPEDGIMAEHLGHACALASLWGLVPLT 660
QY 661 LGLLVH 666
Db 661 LGLLVH 666

RESULT 3
32804
AAW92804 standard; Protein: 666 AA.
XX AC AAW92804;
XX DT 07-MAY-1999 (first entry)
XX DE EP-892047 Seq ID 3.
XX KW Semaphorin L; human; immunosuppressant; anti-inflammatory; gene therapy;
KW organ transplantation; inflammation therapy; immunotherapy; agonist;
KW immunomodulatory; antagonist.
XX OS Homo sapiens.
XX PN EP892047-A2.
XX PD 20-JAN-1999.
XX PF 06-JUL-1998; 98EP-0112470.
XX PR 11-FEB-1998; 98DE-1005371.
XX PR 09-JUL-1997; 97DE-1029211.
XX PA (HMRI) HOECHST MARION ROUSSEL DEUT GMBH.
XX PI Ensser A, Fleckenstein B;

epok
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ap n

XX WPI; 1999-083564/08.
XX New semaphorin L proteins - used as immunosuppressants and
PT antinflammatory agents in organ transplants, inflammation therapy,
PT immunotherapy and gene therapy
XX Claim 2; Page 61-64; 135pp; German.
XX This invention describes a novel human semaphorin L protein. This protein
CC or its encoding DNA are useful as immunosuppressants and/or
CC anti-inflammatory agents in organ transplantation, inflammation therapy,
CC immunotherapy and gene therapy. The DNA can be used to produce knock-out
CC or knock-in animals for research purposes. The proteins or DNA can be
CC used to search for the corresponding receptors or to screen for
CC immunomodulatory agonists or antagonists.
XX Sequence 666 AA:
Query Match 100.0%; Score 3615; DB 20; Length 666;
Best Local Similarity 100.0%; Pred. No. 5.3e-304;
Matches 666; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MTPTTTPGGAAPSAPRARVPGPPARLGLPLRLRLLLLLWAAAAAQAQHLRSGPRIFAVWKG 60
Db 1 MTPTTTPGGAAPSAPRARVPGPPARLGLPLRLRLLLLLWAAAAAQAQHLRSGPRIFAVWKG 60
QY 61 HVGQDRVDFGQTEPHITVLFHEFGSSVWYGGKGYVLEDFPEGKNASVTVNIGSTKGC 120
Db 61 HVGQDRVDFGQTEPHITVLFHEFGSSVWYGGKGYVLEDFPEGKNASVTVNIGSTKGC 120
QY 121 LDKRCENYITLLRRSEGLLACGTNARHPSCWNLVNGTVPLGEMRGYAPSPDENSIV 180
Db 121 LDKRCENYITLLRRSEGLLACGTNARHPSCWNLVNGTVPLGEMRGYAPSPDENSIV 180
QY 181 LFEQDEVYSTIRKQYNGKIPRFRIRGESELYTSDTVNQNFQIKATIVHQDAYDDKI 240
Db 181 LFEQDEVYSTIRKQYNGKIPRFRIRGESELYTSDTVNQNFQIKATIVHQDAYDDKI 240
QY 241 YFFREDNDKNEAPLNVSRAQLCRGQGGESSLSVSKWNTFLKAMLVCSDAATNKNF 300
Db 241 YFFREDNDKNEAPLNVSRAQLCRGQGGESSLSVSKWNTFLKAMLVCSDAATNKNF 300
QY 301 NQLQDVFLLPDPGQWRDTRVYGVFSNPWNYSAVCVYSLGDDIDKVFRTSSLKGYHSSLPN 360
Db 301 NQLQDVFLLPDPGQWRDTRVYGVFSNPWNYSAVCVYSLGDDIDKVFRTSSLKGYHSSLPN 360
QY 361 PRPGKCLPDQOQIPTETFOVADRHPEVAQRVEPMGPKLTPLFHSKYHYQKVAVHRMOASH 420
Db 361 PRPGKCLPDQOQIPTETFOVADRHPEVAQRVEPMGPKLTPLFHSKYHYQKVAVHRMOASH 420
QY 421 GETFHVLYLTTDRGTTHKVVPEGEQHSFAFNIMEIQPFRRAAAQTMSLDAERKLYVS 480
Db 421 GETFHVLYLTTDRGTTHKVVPEGEQHSFAFNIMEIQPFRRAAAQTMSLDAERKLYVS 480
QY 481 SOWEVSQVPLDCEVYGGCHCLMSRDYPCGWDQGRGCISSYSSRSVLSQSNAPHPKE 540
Db 481 SOWEVSQVPLDCEVYGGCHCLMSRDYPCGWDQGRGCISSYSSRSVLSQSNAPHPKE 540
QY 541 CNPKPDKAPLQKVS LAPNSRYLLSCPMESRHATYSWRHKNVQSCPEGHQSPNCILFI 600
Db 541 CNPKPDKAPLQKVS LAPNSRYLLSCPMESRHATYSWRHKNVQSCPEGHQSPNCILFI 600
QY 601 ENLTAQQYGHYFCEAQEGSYFREAQHWQLLPEDGIMAEHLGHACALASLWGLVPLT 660
Db 601 ENLTAQQYGHYFCEAQEGSYFREAQHWQLLPEDGIMAEHLGHACALASLWGLVPLT 660
QY 661 LGLLVH 666
Db 661 LGLLVH 666
RESULT 4

Qy 481 SWEVSQVPLDLCEVYGGGCHGCLMSRDPYCGWDQGRCSISYSSERSVLQINPAEPHKE 540
Db 481 SWEVSQVPLDLCEVYGGGCHGCLMSRDPYCGWDQGRCSISYSSERSVLQINPAEPHKE 540
Qy 541 CPNPKPKAPLOKVS LAPNSRYIYLSCPMESRHATYSWRHKNENVEQSCPEGHQSPNCILFI 600
Db 541 CPNPKPKAPLOKVS LAPNSRYIYLSCPMESRHATYSWRHKNENVEQSCPEGHQSPNCILFI 600
Qy 601 ENLTAQOYGHYFCEAQSRYFREAQHWOLLPEDEGIMAEHLGLGHACALAAASLWGLVPLTLT 660
Db 601 ENLTAQOYGHYFCEAQSRYFREAQHWOLLPEDEGIMAEHLGLGHACALAAASLWGLVPLTLT 660
Qy 661 LGLLVH 666
Db 661 LGLLVH 666
RESULT 7
AAV56854
ID AAY56854 standard; Protein: 634 AA.
AC AAY56854;
X 10-APR-2000 (first entry)
XX Human semaphorin K1 polypeptide.
DE Semaphorin K1; cellular physiology; neurite outgrowth; neuron; human;
KW immunogen; pharmaceutical.
XX Homo sapiens.
XX JP11341988-A.
PD 14-DEC-1999.
XX 11-MAR-1999; 99JP-0065672.
XX 11-MAR-1998; 98US-0041236.
XX (EXEL-) EXELIXIS PHARM INC.
XX WPI; 2000-109378/10.
DR N-PSDB; AA246841.
XX New semaphorin polypeptides, useful cell physiology modulators and immunogens -
PS Claim 1; Page 12-15; 57pp; Japanese.
XX The invention provided isolated human semaphorin K1 polypeptides. The polypeptides, or nucleic acids encoding them, can be used to modulate cellular physiology by modulating semaphorin K1 activity, e.g. semaphorin K1 polypeptide fragments or antisense nucleic acids can be used to enhance neurite outgrowth from damaged neurons. The polypeptides can also be used as immunogens, reagents for isolating other semaphorins, or as reagents for screening chemical libraries for lead pharmaceutical agents. The nucleic acids can also be used as probes and primers for diagnostic purposes. The present sequence represents the human semaphorin K1 polypeptide.
XX Sequence 634 AA;
SQ Query Match 95.2%; Score 3443; DB 21; Length 634;
Best Local Similarity 100.0%; Pred. No. 3.9e-289;
Matches 634; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 33 LLLLLAAAAAQAHLRSRGPFAVMKGVQDRVDFGQTEPHTVLFHPEGSSVWVWGR 92
Db 1 LLLLLAAAAAQAHLRSRGPFAVMKGVQDRVDFGQTEPHTVLFHPEGSSVWVWGR 60
Qy 93 GKYVLFDFPEGKNASVRTVNI GSTKSGCLDKRDCENYITLLERSEGLACGTNARHPSC 152
|||||

Db 61 GKYVLFDFPEGKNASVRTVNI GSTKSGCLDKRDCENYITLLERSEGLACGTNARHPSC 120
Qy 153 WNLVNGTVVPLGEMRGVAPFSPDENSILVLPFGDEVYSTIRKQEYNGKIPRFRIRGESEL 212
Db 121 WNLVNGTVVPLGEMRGVAPFSPDENSILVLPFGDEVYSTIRKQEYNGKIPRFRIRGESEL 180
Qy 213 YTSVTMGNPOFIKATIVHQDOAYDDKIYFFREDNPDKNPEAPLNSRVAQLCRGDOGG 272
Db 181 YTSVTMGNPOFIKATIVHQDOAYDDKIYFFREDNPDKNPEAPLNSRVAQLCRGDOGG 240
Qy 273 ESSLSVSKWNTFLKAMLVCSDAATNKNFNRLQDVFLLPDPGQWRDTRVYGVFNPWNYS 332
Db 241 ESSLSVSKWNTFLKAMLVCSDAATNKNFNRLQDVFLLPDPGQWRDTRVYGVFNPWNYS 300
Qy 333 AVCVYSLGDDIKVFTSSSLKGYHSSLNPRPGKCLPDQOPIPTETFOVADRHPEVAORVE 392
Db 301 AVCVYSLGDDIKVFTSSSLKGYHSSLNPRPGKCLPDQOPIPTETFOVADRHPEVAORVE 360
Qy 393 PMGPLKTPLFHSHKYHYQKVAVHRMQASHGETFHVLYLTTRGTIHKVVEPGEQHSFAFN 452
Db 361 PMGPLKTPLFHSHKYHYQKVAVHRMQASHGETFHVLYLTTRGTIHKVVEPGEQHSFAFN 420
Qy 453 IMEIQPFERRAAAIQTMSLDAERRKLYVSSQWESVQVPLDLCEVYGGGCHGCLMSRDPYCG 512
Db 421 IMEIQPFERRAAAIQTMSLDAERRKLYVSSQWESVQVPLDLCEVYGGGCHGCLMSRDPYCG 480
Qy 513 WDQGRCSISYSSERSVLQINPAEPHKECPNPKAPLOKVS LAPNSRYIYLSCPMESRH 572
Db 481 WDQGRCSISYSSERSVLQINPAEPHKECPNPKAPLOKVS LAPNSRYIYLSCPMESRH 540
Qy 573 ATYSWRHKNENVEQSCPEGHQSPNCILFIENLTAQOYGHYFCEAQSRYFREAQHWOLLPE 632
Db 541 ATYSWRHKNENVEQSCPEGHQSPNCILFIENLTAQOYGHYFCEAQSRYFREAQHWOLLPE 600
Qy 633 DGIMAEHLGLGHACALAAASLWGLVPLTLTGLLVH 666
Db 601 DGIMAEHLGLGHACALAAASLWGLVPLTLTGLLVH 634
RESULT 8
AAV82434
ID AAY82434 standard; Protein: 664 AA.
XX AC AAY82434;
XX 27-JUN-2000 (first entry)
XX Mouse CDw108 protein SEQ ID NO:8.
DE Mouse; CDw108; detection; diagnosis; HIV; infection; anti-HIV.
KW Mus musculus.
OS WO200012700-A1.
PN 09-MAR-2000.
PD 25-AUG-1999; 99WO-JP04571.
XX 26-AUG-1998; 98JP-0239687.
PR (SHIO) SHIONOGI & CO LTD.
XX Yamada A, Kubo K, Itoh K;
PI WPI; 2000-246752/21.
XX N-PSDB; AAA08189.
XX New CDw108 protein, useful in diagnosis of and as remedy for CDw108-associated diseases e.g. HIV-1 infection, and in study of biological functions and molecular specificity of CDw108 -
XX Example 8; Page 64-69; 73pp; Japanese.
PS

XX The present invention describes human CDw108. The CDw109 nucleotide
CC and protein sequences can be used in the diagnosis and treatment of
CC CDw108-associated diseases e.g. HIV-1 infection, and in study of
CC biological functions and molecular specificity of CDw108. The present
CC sequence represents mouse CDw108 given in an example from the present
CC invention.

XX SQ Sequence 664 AA;

Query Match 88.98; Score 3214; DB 21; Length 664;
Best Local Similarity 89.18; Pred. No. 2.9e-269;
Matches 594; Conservative 26; Mismatches 43; Indels 4; Gaps 2;

Qy 1 MTPPPGGAAPAPRARVPGPPARLGLRLRLRLLLWAAASAGHLSRSGPRISAVWK 60
Db 1 MTPPPGGAAPAPRARVLSLPAREGLRLRLRLLLVFWAASAGHSRSGPRISAVWK- 59
61 HVGQDRVDFGTEPHTVLFHEPGSSVWVGGRGVYLFDFPEGKNASVRTVNIQSTKGC 120
Db --GDHVDVFSQEPHTVLFHEPGSFVWVGGRGVYHFNFPPEGKNASVRTVNIQSTKGC 117
Qy 121 LDKRDCENYITLLRRSGLLACGTNARHPSCWNLVNGTVV-PLGEMRGYAPFSPDENS 179
Db 118 OKDQCGYITLLRRGGLLVCGTNARKPCWNLVNDVSVMSGEMRGYAPFSPDENS 177
Qy 180 VLFEGDEVYSTIRKQYNGKIPRRIRGESELYTSDTVMQNPQFIKATIVHQDQAYDDK 239
Db 178 VLFEGDEVYSTIRKQYNGKIPRRIRGESELYTSDTVMQNPQFIKATIVHQDQAYDDK 237
Qy 240 IYFFREDNPKNPEAPLVNSRVAQLCRDQGGESSLSVKWNTFLKAMLVCSAATNKN 299
Db 238 IYFFREDNPKNPEAPLVNSRVAQLCRDQGGESSLSVKWNTFLKAMLVCSAATNKN 297
Qy 300 FNRLQDFVLLPDSQWRDTRVYGVSNPNWYSAVCVYSLGDIKVFRTSSLKGVHSLP 359
Db 298 FNRLQDFVLLPDSQWRDTRVYGVSNPNWYSAVCVYSLGDIKVFRTSSLKGVHMLP 357
Qy 360 NRPFGKCLPDQOPIPTETFOVADRHPEVAQRVPEMPGLKTLPLFHSKYHYQKVVHMQAS 419
Db 358 NRPFGKCLPKKQOPIPTETFOVADSHPEVAQRVPEMPGLKTLPLFHSKYHYQKVVHMQAS 417
Qy 420 HGETFHVLYLTDRGTIHKVVEPGEQHSFAFNIMEIQPFRAAAIQTMSLDAERKLYV 479
Db 418 NGETFHVLYLTDRGTIHKVVEPGEQHSFAFNIMEIQPFRAAAIQTMSLDAERKLYV 477
Qy 480 SSQWESVQVPLDCEVYGGCGHGLMSRDPYCGMDQGRCSISYSSERSVLOSINPAEPKH 539
Db 478 TSQWESVQVPLDCEVYGGCGHGLMSRDPYCGMDQGRCSISYSSERSVLOSINPAEPKH 537
Qy 540 ECPNPKDKAPLQKYSALPNRSYLYLSCPMESRHATYSWRHKENVBQSCPEGHQSPNCILF 599
Db 538 ECPNPKDEAPLQKYSALPNRSYLYLSCPMESRHATYLRHEENVBQSCPEGHQSPNCILF 597
Qy 600 TENLTARQYGHYFCEAQQSGSFREAHQWOLLPLPEDGIMAEHLGLHACALAAISLWGLVPTL 659
Db 598 TENLTARQYGHYFCEAQQSGSYLREAHQWELLPLPEDRALAEQLMGHARALAAISLWGLVPTL 657
Qy 660 TLGLLVH 666
Db 658 ILGLLVH 664

RESULT 9
AAB93440
ID AAB93440 standard; Protein: 379 AA.
XX
AC AAB93440;
XX
DT 26-JUN-2001 (first entry)
XX
DE Human protein sequence SEQ ID NO:12678.
XX

Human; primer; detection; diagnosis; antisense therapy; gene therapy.
XX Homo sapiens.
XX EPI074617-A2.
XX 07-FEB-2001.
XX 28-JUL-2000; 2000EP-0116126.
XX 29-JUL-1999; 99JP-0248036-
XX 27-AUG-1999; 99JP-0300253.
XX 11-JAN-2000; 2000JP-0118776.
XX 02-MAY-2000; 2000JP-0183767.
XX 09-JUN-2000; 2000JP-0241899.
XX (HELI-) HELIX RES INST.
XX Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
XX Ishii S, Sugiyama T, Wakamatsu A, Negai K, Otsuki T;
XX WPI: 2001-318749/34.
XX Primer sets for synthesizing polynucleotides, particularly the 5602
XX full-length cDNAs defined in the specification, and for the detection
XX and/or diagnosis of the abnormality of the proteins encoded by the
XX full-length cDNAs -
XX Claim 8; SEQ ID 12678; 2537pp + CD ROM; English.
XX The present invention describes primer sets for synthesizing 5602
XX full-length cDNAs defined in the specification. Where a primer set
XX comprises: (a) an oligo-dT primer and an oligonucleotide complementary
XX to the complementary strand of a polynucleotide which comprises one of
XX the 5602 nucleotide sequences defined in the specification, where the
XX oligonucleotide comprises at least 15 nucleotides; or (b) a combination
XX of an oligonucleotide comprising a sequence complementary to the
XX complementary strand of a polynucleotide which comprises a 5'-end
XX sequence and an oligonucleotide comprising a sequence complementary to a
XX polynucleotide which comprises a 3'-end sequence, where the
XX oligonucleotide comprises at least 15 nucleotides and the combination of
XX the 5'-end sequence/3'-end sequence is selected from those defined in
XX the specification. The primer sets can be used in antisense therapy and
XX in gene therapy. The primers are useful for synthesizing polynucleotides,
XX particularly full-length cDNAs. The primers are also useful for the
XX detection and/or diagnosis of the abnormality of the proteins encoded by
XX the full-length cDNAs. The primers allow obtaining of the full-length
XX cDNAs easily without any specialised methods. AAB03166 to AAB13628 and
XX AAB13633 to AAB18742 represent human cDNA sequences; AAB92446 to
XX AAB95893 represent human amino acid sequences; and AAB13629 to AAB13632
XX represent oligonucleotides, all of which are used in the exemplification
XX of the present invention.

SQ Sequence 379 AA;

Query Match 57.5%; Score 2079; DB 22; Length 379;
Best Local Similarity 100.0%; Pred. No. 2.6e-171;
Matches 379; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 288 MLVCSDAATNKNFNRLQDFVLLPDSQWRDTRVYGVSNPNWYSAVCVYSLGDIKVKPR 347
Db 1 MLVCSDAATNKNFNRLQDFVLLPDSQWRDTRVYGVSNPNWYSAVCVYSLGDIKVKPR 60
Qy 348 TSSLKGYHSSLPNRPGRKCLPDQOPIPTETFOVADRHPEVAQRVPMGKTLPLFHSKYH 407
Db 61 TSSLKGYHSSLPNRPGRKCLPDQOPIPTETFOVADRHPEVAQRVPMGKTLPLFHSKYH 120
Qy 408 YQKVAVHRMQASHGETTFHVLYLTDRGTIHKVVEPGEQHSFAFNIMEIQPFRAAAIQT 467
Db 121 YQKVAVHRMQASHGETTFHVLYLTDRGTIHKVVEPGEQHSFAFNIMEIQPFRAAAIQT 180
Qy 468 MSLEAERKLYSSQWESVQVPLDCEVYGGCGHGLMSRDPYCGMDQGRCSISYSSERS 527
XX


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Db 4 LCVSIRLMIL-SAITAAKSRFDKPRLIIVNLTDGQGHFR-FGPOEPHTVLFHSLNSD 61
Qy 87 VMVGGKGVYLFDFPEGKNASVRTVNIKSTKGCSCLDKDCENYITLLERRSEGLLACGN 146
Db 62 YVGGNNIYLFDFAHSSNASTALINIYSTHRLSTCENFYLLHNDGLLACGN 121
Qy 147 ARHPCSWNLVNGTVPLGSMRGYAPSPDENSLVLFEGDEVYSTIRKQYNGKIPFRRI 206
Db 122 SQKPCSWLINLTTQFLGPKLGLAPSPSSGNLVLFQDNDVTSTNLKSLSGSHKFRRI 181
Qy 207 RGESELYTSDTVMQNPFKATIVHODQAYDDKIYFFREDNPKNPAPLNVSVAQLC 266
Db 182 AQVELYTSDTAMHRPQFQATAVHNKESYDDKIYFFQENSHSDFKQPHPTVPRVQVC 241
Qy 267 RGDQGESSLVSYSKNTLKAFLVCSDAATNKNFNLRLQDVFLLPDPGQWRTRVYGVFS 326
Db 242 SSDQGESSLVSYSKNTLKAFLVCSDAATNKNFNLRLQDVFLLPDPGQWRTRVYGVFS 301
Qy 327 NPWNSAVCVYSLGIDIKVFTSSLSKGYHSSLPNRPKCLPDQOPIPTETFOVADRHP 386
Db 302 SPWNFSAVCVFTVKDIDHVFETSKLKNYHKLTPRPGQCMKNHQHVPETETFOVADRYPE 361
Qy 387 VAORVEPGLPKTLFHSKHYHOKVAVHVMQASHGETF--HVLVLTDTDRGTTHKVVPECE 444
Db 362 VADPYQKNNAMFPIIQSKIYTKLVYRVE--YGVFWATIFYLTITNGTIHIYVRVED 419
Qy 445 QHSPFAFIMEIQPFRRAAIIQMSLDAERRKLYVSSOWEVSQVPLDLCEVYGGGCHGCL 504
Db 420 SNSLTALNLEINPQKPAPIQNLIDNTNLKLYNSEWSEVSEVPLDLCSVYVGNDFSCF 479
Qy 505 MSRDPCYGDWGRCLISYSSERSVLOSINPAEP--HKPCPNPKPKAPLQKVS LAPNSRY 562
Db 480 MSRDPLCTWYNNTC---SFKQSVSETGPGANRTLSEMCGDHYAPTVMVKHQSIPLLSNS 536
Qy 563 YLSCPMSRHATYSWRHKNVEOCEPGHQPNCILFIENLTAQOYGHYFCEAQECS 619
Db 537 YLSCPAVSNHADFVTKDGTGTEKRVKTHKNDKILLIANSTATNGTHVCNKNKEDS 593

RESULT 12
AA28553
ID AA28553 standard; Peptide: 215 AA.
XX AC AA28553;
XX 19-OCT-1999 (first entry)

SBSEMWL polypeptide #2.
XX SBSEMWL; semaphorin; axon outgrowth; multidrug resistance; spinal injury;
KW neurodegeneration; viral infection; cancer.
XX Homo sapiens.
XX WO9938885-A2.
PD 05-AUG-1999.
XX 25-JAN-1999; 99WO-EP00422.
XX 30-JAN-1998; 98EP-0300694.
XX (SMK ) SMITHKLINE BEECHAM PLC.
XX Hayes PD, Michalovich D;
XX WPI; 1999-479166/40.
DR N-PSDB; AA200103.
XX Novel SBSEMWL molecules used for treating neurodegeneration, spinal
PT injury, neuropathies, and neuromuscular, psychiatric, and
PT inflammatory disorders, developmental malfunctions, cancer, immune
PT system disorders and viral infections
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XX Claim 17; Page 32; 34pp; English.
PS This sequence is human SBSEMWL polypeptide #2. SBSEMWL polypeptides are
XX believed to be members of the Semaphorin family of polypeptides.
CC Semaphorin polypeptides act as recognition molecules and are involved in
CC axon outgrowth control. They are also likely to have a role in immune
CC function and multidrug resistance. SBSEMWL polypeptides may be used for
CC detecting diseases associated with inappropriate SBSEMWL activity or
CC levels. SBSEMWL polypeptides and polynucleotides, agonists, antagonists
CC and antibodies are used to treat neurodegeneration, spinal injury,
CC neuropathies, and neuromuscular, psychiatric, and inflammatory disorders,
CC developmental malfunctions, cancer, disorders of the immune system and
CC viral infection. The polynucleotide is also useful as a source of primers
CC and probes, and also for detecting the above diseases.
XX SQ Sequence 215 AA;

Query Match 28.5%; Score 1029; DB 20; Length 215;
Best Local Similarity 91.6%; Pred. No. 1e-80;
Matches 197; Conservative 2; Mismatches 14; Indels 2; Gaps 2;

Qy 63 GQDRVDFGQTEPHTVLFHEPGSSVWVGGRGVYLFDFPEGKNASVRTVNIKSTKGCSCLD 122
Db 1 GQDRVDFGQTEPHTVLFHEPGSSVWVGGRGVYLFDFPEGKNASVRTVNIKSTKGCSCLD 60
Qy 123 KRDCENYITLLERRSEGLLACGTNARHPSCWNLVNGTVPLGEMRGYAPFSPDEN-SLVL 181
Db 61 KRDCENYITLLERRSEGLLACGTNARHPSCWNLVNGTVPLGEMRGYAPFSPDENVPWFC 120
Qy 182 FEGDEVYSTIRK-QEYNGKIPRRIRGESELYTSDTVMQNPFKATIVHODQAYDDKI 240
Db 121 FEGDEVYSTIRKARNYWNEDPRFRIRGESELYTSDTVMQNPFKATIVHODQAYDDKI 180
Qy 241 YFFREDNPKNPAPLNVSVAQLCRGDQGESS 275
Db 181 YFFREDNPKNPAPLNVSVAQLCRGDQGESS 215

RESULT 13
ABB97964
ID ABB97964 standard; Protein: 893 AA.
XX AC ABB97964;
XX 06-SEP-2002 (first entry)
XX Human protein sequence #31.
XX Human; brain; tonsil; hippocampus; foetal brain; diagnosis.
KW Homo sapiens.
OS WO200252005-A1.
XX 04-JUL-2002.
XX 20-DEC-2001; 2001WO-JP11217.
XX 22-DEC-2000; 2000JP-0389742.
XX (KAZU-) KAZUSA DNA RES INST FOUND.
XX (CELE-) CELESTAR LEXICO-SCI LTD.
XX Ohara O, Nagase T, Nakajima D;
XX WPI; 2002-500762/53.
DR N-PSDB; ABN83984.
XX Genes and their expression products cloned from human cDNA libraries
PT for treatment and diagnosis of diseases associated with their
PT expression
XX
```

PS Claim 1(a): Page 126-132; 238pp; Japanese.

XX The invention relates to DNA encoding polypeptides directly cloned from
 CC cDNA libraries originating in adult whole brain, human tonsil, human
 CC adult hippocampus and human foetal brain. Polypeptides and
 CC polynucleotides of the invention may be used in the investigation of
 CC differential expression of the DNA sequences in normal subjects and
 CC disease patients. They may also be used in the production of antibodies,
 CC oligonucleotide probes and DNA chips for diagnosis and identification
 CC of drugs for treatment of diseases with which the DNA sequences are
 CC associated. The sequences given in records ABB97934-ABB97964 represent
 CC human proteins of the invention.

XX SQ Sequence 893 AA;

Query Match 18.8%; Score 680.5; DB 23; Length 893;
 Best Local Similarity 30.1%; Pred. No. 1.5e-49;
 Matches 220; Conservative 89; Mismatches 29; Gaps 29;

QY 4 PPGRAAPSAPRVRPVP--RLGL-----PLRLRLLL----- 37
 DB 35 PVSPAEPPEPRDTVAPALRLMTAGLRSWLAAPKALPPRPPLLLLLLLLLLQPP 94
 QY 38 ---WAAASAGHLSRPRFVAVKGVHGVQDRDFGTEPHVLFHFGSGSSVWVGGRGK 94
 DB 95 PPTWALSPLSLPGSEPRFL-----RFEAHSISNYTALLSRDGRGTLVYGARE 145
 QY 95 VY-----LDFPECKNASVRTVNIKSTKSCLDK-----RDCENYI-TLLERRSEGLLAC 143
 DB 146 LFASSNLSPFLGGEYQELLWGADEAKKQCSFKGKQDRDCQNYIKILLPLSGSHLFTC 205
 QY 144 GTNARHPSCW--NLVNGTV-----VPLGEMRGYAPFSPDENSILVLFEGDEVYSTIRKQ 194
 DB 206 GTAAFSNCTYINMETLARDEKNGLLEDGKRCRPFDPNFKSTALVVDGELY-TGTVS 264
 QY 195 EYNGKIFRFRIRCESELYTSDTV--MONPOFIKATIVHOD----QAYDOKIYFFREDN 248
 DB 265 SFQNDPAISRQSLRTKTESLWNLQDFAFVASVYIPESLSLQGGDDDKIYFFSETG 324
 QY 249 PDKNEAPLNVSRVAQLCRGDGSESSLSVSKWNTFLKAMLVCSDAATNKNFNRLQDVFL 308
 DB 325 QEPEFFENTIVSRIARICKGDEGSEVILQ-QRWTSFLKALQLCSRPDDGPFNVLDQVFT 383
 QY 309 LPDPSGQWRDTRVGVFSNPWNY-----SVCVYSLGDIDKVF-----RTSSLKGY 354
 DB 384 LSPSPQMDRDTLFYGVFTSQWHRGTTGEGSAVCVFTMKDVORVFSGLYKEVNRTEQWYTV 443
 QY 355 HSSLNPNRPCKCLPD--QQPIPTFTFOVADR-----HPEVAQVPEPMGPKLTPL 401
 DB 444 THPVTPRPGACITNSAREKINSLSLPDRVLFNFKDHFIMDQGVRSMLLQPP----- 498
 QY 402 FHSKYHYQKVAHVRMOASHGETFHVLYLTTDRGTIHKVWEPGEHSGFAFNIMEIQPFR 461
 DB 499 ---QARQVAVHRVPLGLH-HYDVLFELGTGDRGLHRAVSGPRVHI-----IEELQIFSS 550
 QY 462 AAATQMSLDAERKLYSVSSQWESVQVPLDCEVYGGCGHGLMSRDPYCGWDGRC--I 519
 DB 551 GQPVQNLDDTHRGLLAASHSGVQVPMANCSLY-RSCGDCLLARDPYCAWSSGSKHV 609
 QY 520 SIYSSS---RSVLOSINPAEPHKEC-----PNPKP-DKAPLOKVSILAPNSRYILSCPM 568
 DB 610 SLVPOQLATRPWIODIEGASAKDLCSASSVSPVFTGPKPCQVQFQNTVNTLACPL 669
 QY 569 ESRHATYSWRHK-----ENVEGSCPEHGSPNCILFIENLTAQQVGHYFC-EAQEGSYFREA 624
 DB 670 LSNLATRLWLRNGAPVNASASC---HVLPTGDLILL--VGTQQLGEFCWCSLEEGFQOLVA 724
 QY 625 QHWLLPEDGI 635
 DB 725 SYCPEVVVEDGV 735

RESULT 14

AAE03818
 ID AAE03818 standard; Protein; 832 AA.
 XX
 AC AAE03818;
 XX
 DT 08-AUG-2001 (first entry)
 XX
 DE Human gene 1 encoded secreted protein HKABL26, SEQ ID NO: 64.
 XX
 KW Human; secreted protein; proliferative disorder; cancer; tumour; asthma;
 KW foetal abnormality; developmental abnormality; haematopoietic disorder;
 KW immune system disorder; AIDS; autoimmune disease; rheumatoid arthritis;
 KW Parkinson's disease; cognitive disorder; schizophrenia; skin disorder;
 KW psoriasis; sepsis; diabetes; atherosclerosis; cardiovascular disorder;
 KW inflammation; neurological disorder; Alzheimer's disease; food additive;
 KW angiogenic disorder; kidney disorder; gastrointestinal disorder; allergy;
 KW pregnancy-related disorder; endocrine disorder; infection; wound healing;
 KW cell culture; chemotaxis; vunerary; binding partner identification;
 KW gene therapy.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..38
 FT Protein /label= Signal_peptide
 FT 39..832
 FT /note= "Mature secreted protein"
 XX
 WO200136440-A1.
 XX
 PD 25-MAY-2001.
 XX
 PF 15-NOV-2000; 2000WO-US31282.
 XX
 PR 19-NOV-1999; 9905-0166414.
 PR 21-JUL-2000; 2000US-0219665.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 PI Ruben SM, Komatsoulis GA, Birse CE, Moore PA;
 XX
 WI: 2001-343795/36.
 DR N-PSDB; AAD08283.
 XX
 PT Isolated nucleic acid molecule encoding a human secreted protein is
 PT used in preventing, treating or ameliorating a medical condition -
 XX
 PS Claim 11: Page 476-479; 553pp; English.
 XX
 CC AAD08283-AAD08355 represent cDNAs corresponding to 23 human secreted
 CC protein genes, and AAE03818-AAE03870 represent the proteins they encode.
 CC AAE03871-AAE03896 represent human secreted protein fragments or variants.
 CC The secreted proteins and their genes are useful for preventing,
 CC treating or ameliorating medical conditions, e.g., by protein or gene
 CC therapy. Pathological conditions can be diagnosed by determining the
 CC amount of the new protein in a sample or by determining the presence of
 CC mutations in the new genes. Specific uses are described for each of the
 CC 23 genes, based on the tissues in which they are most highly expressed,
 CC and include developing products for the diagnosis or treatment of
 CC proliferative disorders, cancer, tumours, foetal and developmental
 CC abnormalities, haematopoietic disorders, diseases of the immune system,
 CC AIDS, autoimmune diseases (e.g., rheumatoid arthritis), inflammation,
 CC allergies, neurological disorders (e.g., Alzheimer's disease,
 CC Parkinson's disease), cognitive disorders, schizophrenia, asthma,
 CC cardiovascular disorders, angiogenic disorders, kidney disorders,
 CC gastrointestinal disorders, pregnancy-related disorders, endocrine
 CC disorders, and infections. The proteins can also be used to aid wound
 CC healing and epithelial cell proliferation, to prevent skin aging due to
 CC sunburn, to maintain organs before transplantation, for supporting cell
 CC culture of primary tissues, to regenerate tissues, to identify their
 CC cognate ligands or binding partners, and in chemotaxis, and can be used
 CC as a food additive or preservative to modify storage properties.

CC Antibodies specific for a protein of the invention can be used in
CC alleviating symptoms associated with the disorders mentioned above, and
CC in diagnostic immunoassays e.g., radioimmunoassay or enzyme linked
CC immunosorbent assay (ELISA). The present sequence represents a human
CC secreted protein of the invention.
XX
SQ Sequence 832 AA;

Query Match 18.7%; Score 674.5; DB 22; Length 832;
Best Local Similarity 30.5%; Pred. No. 4.4e-49;
Matches 214; Conservative 90; Mismatches 285; Indels 113; Gaps 28;

QY 12 SAPRARVPGPPARLGLPLRLRLLLLL-----WAAASAOQHLSRGPRIFAVWKGHVG 63
DB 8 AAPWGAALPPRP-----PLLLLLLLLLLQPPPTWALSPLRISLPLGSEERPF----- 55

QY 64 QDRVDFGQTEPHTVLFHEPGSSVWVGGRKVV-----LFDPEGKNASVTVNIGSTKG 118
DB 56 --RFEAEHISNTYALLSRDGRTRYLVGAREALFALSNSLFLPGGEYQELLWGADAEEKQ 113

QY 119 SCLDK-----RDCENYI-TLLRRSEGLLACGTNARHPSCW--NLVNGTV-----VPL 163
DB 114 QCSFKGKDPQRDCQNKIKILLPLSGSHLFTCGTAAFSPMCTYINMENFTLARDEKGNVLL 173

QY 164 GEMRGYAPSPDENSILVFEDEVYSTIRKQYNGKIPRRIRGSELYTSDTV--MQN 221
DB 174 EDGKGRCPDPNFKSTALVVDGELY-TGTVSSFGQNDPAISRQSRLRPTKTESLNLQD 232

QY 222 PQFIKATIVHOD---QAYDDKIYYFFREDNPKNPEALNVSRAQLCRGDOGGESSLS 277
DB 233 PAFVASAYIPESLGSQGGDDKIYFFSETGQGEFFETIVSRIARIKCDGEGGERVLQ 292

QY 278 VSKWNTFLKAMLYCSDAATNKNFNRLQDVFLLPDPSCQWRDTRVYGVFSNPWNY-----S 332

RESULT 15
ID ABG64522
AC ABG64522;
XX
XX
XX 27-AUG-2002 (first entry)
DE Human albumin fusion protein #1197.
XX
XX Albumin fusion protein; therapeutic protein x; human albumin; HA;
KW human serum albumin; HSA; cancer; reproductive disorder;

KW digestive disorder; immune disorder; endocrine disorder;
KW haematopoietic disorder; neural disorder; connective disorder;
KW cytostatic; antiinfertility; antiinflammatory; antiulcer;
KW immunomodulator; anti-HIV; antidiabetic; haemostatic; nootropic;
KW neuroprotective; antiparkinsonian; antimicrobial; neuroleptic;
KW osteopathic; antiarthritic.
XX
OS Homo sapiens.
OS Synthetic.
PN WO200177137-A1.
XX 18-OCT-2001.
XX 12-APR-2001; 2001WO-US11988.
XX 12-APR-2000; 2000US-229358P.
XX 25-APR-2000; 2000US-199384P.
XX 21-DEC-2000; 2000US-256931P.
XX (HUMA-) HUMAN GENOME SCI INC.
XX Rosen CA, Haseltine WA;
PI WPI; 2002-010886/01.
XX
XX New fusion protein for treating disease e.g. diabetes comprises an
XX albumin fused to a therapeutic protein -
XX
XX Claim 1; Page 1288-1291; 2102pp; English.
XX
XX The present invention relates to albumin fusion proteins comprising a
XX therapeutic protein X and human albumin (HA, also known as human serum
XX albumin, HSA). The proteins are useful for treating a disease or
XX disorder that may be modulated by therapeutic protein X. The albumin
XX extends the shelf-life of protein X, and may increase its biological
XX in vitro/in vivo activity. The protein is useful for treating and
XX diagnosing disorders such as cancer, reproductive disorders, digestive
XX disorders (e.g. Crohn's disease, ulcerative colitis), immune disorders
XX (e.g. acquired immunodeficiency syndrome, AIDS), endocrine disorders
XX (e.g. diabetes), haematopoietic disorders, neural disorders
XX (e.g. Alzheimer's, Parkinson's, Creutzfeldt-Jacob disease,
XX encephalomyelitis, meningitis, schizophrenia), and connective disorders
XX (e.g. osteoporosis, arthritis). ABG63326-ABG65518 represent albumin
XX fusion proteins of the invention.
XX
XX Sequence 832 AA;

Query Match 18.7%; Score 674.5; DB 23; Length 832;
Best Local Similarity 30.5%; Pred. No. 4.4e-49;
Matches 214; Conservative 90; Mismatches 285; Indels 113; Gaps 28;

QY 12 SAPRARVPGPPARLGLPLRLRLLLLL-----WAAASAOQHLSRGPRIFAVWKGHVG 63
DB 8 AAPWGAALPPRP-----PLLLLLLLLLLQPPPTWALSPLRISLPLGSEERPF----- 55

QY 64 QDRVDFGQTEPHTVLFHEPGSSVWVGGRKVV-----LFDPEGKNASVTVNIGSTKG 118
DB 56 --RFEAEHISNTYALLSRDGRTRYLVGAREALFALSNSLFLPGGEYQELLWGADAEEKQ 113

QY 119 SCLDK-----RDCENYI-TLLRRSEGLLACGTNARHPSCW--NLVNGTV-----VPL 163
DB 114 QCSFKGKDPQRDCQNKIKILLPLSGSHLFTCGTAAFSPMCTYINMENFTLARDEKGNVLL 173

QY 164 GEMRGYAPSPDENSILVFEDEVYSTIRKQYNGKIPRRIRGSELYTSDTV--MQN 221
DB 174 EDGKGRCPDPNFKSTALVVDGELY-TGTVSSFGQNDPAISRQSRLRPTKTESLNLQD 232

QY 222 PQFIKATIVHOD---QAYDDKIYYFFREDNPKNPEALNVSRAQLCRGDOGGESSLS 277
DB 233 PAFVASAYIPESLGSQGGDDKIYFFSETGQGEFFETIVSRIARIKCDGEGGERVLQ 292

QY 278 VSKWNTFLKAMLYCSDAATNKNFNRLQDVFLLPDPSCQWRDTRVYGVFSNPWNY-----S 332

Db 293 -ORWTSFLKAQLLCSRPDDGFFFNVLQDVFTLSPSPQDWRDTLFYGVFTSQWHRGTTEGS 351
QY 333 AVCVYSLGDIKVF-----RTSSLKGYHSSLPNRPBGKCLPD--QOPIPTETFOVA 381
Db 352 AVCVTMKDVQVRFSGLYKEVNRETQOWTVTHVPTPRPGACITNSARERKINSLSQLP 411
QY 382 DR-----HPEVAQRVEPMGPKLTPLFHSKYHYQKAVAHVHRMQASHGETFHVLYLT 430
Db 412 DRVLNFKDHFELMDQVRSRMLLQP-----QARYQVAVHRVPGULH-HTYDVLFGLG 462
QY 431 TDRGTIHKVVEGESEHSEFAFNIMEIQPFRRAAATQMSLDAERKLYVSSOWEVSQVPL 490
Db 463 TGDGRHLKAVSVGPRVHI-----IEELQIFSSGOPYQNLDDTHRGLLYAAASHGVVQVPM 518
QY 491 DLCEVYGGCHGCLMSRDPYCGWDQGR--ISYSS--RSVLOSINPAEPHKEC--- 541
Db 519 ANCSLY-RSCGDCLLARDPYCAWSSCKHVSLYQPLATRPWIODIEGASAKDLCSSASS 577
QY 542 ---PNPKP-DKAPLOKVSLAPNSRYLLSCPMESRHATYSWRHK---ENVQSCFPGHQSP 594
Db 578 VVSPSFVPTGKPCQVQFQPNVTNTLACPLLSNLATRLWLRNGAPVNASASC---HVLP 634
595 NCILFIENLTAQQYCHYFC-EAQEGSYFREAOHWQLLPEDGI 635
Db 635 TGDLLL--VGTQOLGEBFCWSLEEGFQQLIVASYCPEVVEDGV 674

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